

Title (en)

Tire pressure decrease detection apparatus and method, and computer readable medium therefor

Title (de)

Vorrichtung zur Erkennung der Abnahme des Reifendrucks und Verfahren sowie computerlesbares Medium dafür

Title (fr)

Appareil de détection de baisse de pression de pneu et procédé et support lisible par ordinateur associé

Publication

EP 2695753 A2 20140212 (EN)

Application

EP 13159708 A 20130318

Priority

JP 2012175042 A 20120807

Abstract (en)

A tire pressure decreased detection apparatus comprising rotation speed information detection means, rotation acceleration information calculation means, resonance frequency estimate means for time-series estimating a torsional resonance frequency of the rotation speed information, correlation calculation means for, regarding left and right wheels of driving wheels, calculating a time series correlation of the rotation acceleration information of the left and right wheels, and determination means for determining a decrease in pressure of the tires based on the estimated torsional resonance frequency. In a case where the correlation exceeds a predetermined threshold value, the resonance frequency estimate means stops estimating the torsional resonance frequency.

IPC 8 full level

B60C 23/06 (2006.01)

CPC (source: EP US)

B60C 23/00 (2013.01 - US); **B60C 23/062** (2013.01 - EP US)

Citation (applicant)

- JP 2010023546 A 20100204 - SUMITOMO RUBBER IND
- JP 2010023673 A 20100204 - SUMITOMO RUBBER IND

Cited by

CN107031314A; EP3020579A1; CN109203870A; US9970839B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2695753 A2 20140212; **EP 2695753 A3 20170315**; **EP 2695753 B1 20180516**; JP 2014035207 A 20140224; JP 5649625 B2 20150107; US 2014046602 A1 20140213; US 9688107 B2 20170627

DOCDB simple family (application)

EP 13159708 A 20130318; JP 2012175042 A 20120807; US 201313788614 A 20130307